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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/721,395	11/25/2003	Roy Melvin Grisworld	US 128542-1	9008
759	90 12/23/2004		EXAMINER	
Kenneth S. Wh	<del>-</del>		PENG, KU	O LIANG
General Electric Company One Plastics Avenue		ART UNIT	PAPER NUMBER	
Pittsfield, MA 01201			1712	

DATE MAILED: 12/23/2004.

Please find below and/or attached an Office communication concerning this application or proceeding.

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į.	Application No.	Applicant(s)			
	10/721,395	GRISWORLD, ROY MELVIN			
Office Action Summary	Examiner	Art Unit			
	Kuo-Liang Peng	1712			
The MAILING DATE of this communication appeared for Reply	opears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin ply within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from tte, cause the application to become ABANDONE	nely filed  rs will be considered timely.  the mailing date of this communication.  CD (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 11/	25/03 IDS.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ⊠ Claim(s) <u>1-32</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-32</u> is/are rejected.  7) ⊠ Claim(s) <u>1-32</u> is/are objected to.  8) □ Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers	·				
9)⊠ The specification is objected to by the Examin	er.				
10)☐ The drawing(s) filed onis/are: a)☐ ac	cepted or b) $\square$ objected to by the $\mathfrak k$	Examiner.			
Applicant may not request that any objection to the		` '			
Replacement drawing sheet(s) including the correct		•			
11)☐ The oath or declaration is objected to by the E	examiner. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	nts have been received. Its have been received in Application or the contraction of the c	on No ed in this National Stage			
Attachment(s)	_				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 11/25/03.		atent Application (PTO-152)			

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#### **DETAILED ACTION**

#### Specification

1. The disclosure is objected to because of the following informalities:

In the specification ([0013], line 9), should "akyl" be -- alkyl --?

Appropriate correction is required.

### Claim Objections

2. Claims 1-32 are objected to because of the following informalities:

In Claim 1 (line 4), should "hydrolsilylation" be -- hydrosilylation --?

In Claim 3 (lines 3-4), should "(added to specification)" be removed?

In Claim 5 (lines 1-2), should "(putting this word in a claim renders it legally indefinite under section 112)" be removed?

In Claim 6 (line 1), should "(112 again)" be removed?

In Claim 12, should at least one of R<sup>2</sup> and/or at least one of R<sup>3</sup> be an alkenyl group because the instant composition comprises an alkenyl-containing polydiorganosiloxane?

In Claims 13 and 14 (line 2), should "is" be -- has a viscosity of --?

In Claim 15 (last line), should "CL" be -- Cl --?

In Claim 16 (lines 3-4), should "(do you mean here that conversion reagents to produce the hydride are to be selected from the group consisting of? Yes)" be removed?

In Claim 17 (last line), should "(See edits to claim 3" be removed? Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1 (line 2), the term "condensation reaction product" causes confusion because an alkenyl-containing polydiorganosiloxane under normal reaction condition will not involve in a condensation reaction. Especially, there is no functional group recited in the aromatic soluble silicone resin or resinous copolymer.

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In Claim 1 (line 6), "hydrosilylation groups" causes confusion because after the hydro[l]silylation agent is reacted with the aforementioned "condensation reaction product", there should be no hydrosilylation groups left.

Claims 1-32 recite the limitation "silanol groups" in Claim 1 (line 5). There is insufficient antecedent basis for this limitation in the claim.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Exparte Steigewald, 131 USPQ 74 (Bd. App. 1961); Ex parte Hall, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, Claim 9 recites the broad recitation "comprises from about 0.2% to about 5.0% by weight", and Claim 10 recites "preferably comprises from about 1.0% to

about 3.0% by weight" and Claim 11 recites "most preferably comprises from about 1.5% to about 2.5% by weight" which are the narrower statements of the ranges/limitations.

Regarding Claim 12, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 15-22 and 29 recite the limitation "R" in Claim 15 (last line). There is insufficient antecedent basis for this limitation in the claim.

In Claim 15 (lines 4-5), when X is N and CL[Cl], the Si atom has open valency.

Claim 16 recites the limitation "silicon-hydride functionality" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In Claim 16 (line 2), the term "preferably" renders the claim indefinite because it is not clear as to what the non-preferred embodiment is.

Claims 17-22 recite the limitation "organic solvents" in Claim 17 (line 2). There is insufficient antecedent basis for this limitation in the claim.

In Claim 24 (line 2), it is not clear as to what "from about 5 to about ppm" refer to.

In Claim 30 (line 1), the phrase "reaction product" causes confusion because component B) is a catalyst that typically does not directly involve in the reaction, per se. Instead, a catalyst merely catalyzes the reaction. Should Applicants intend to claim "The <u>cured</u> composition of claim 1"?

Claim 31 recites the limitation "the organic solvent" in line 1. There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Liao (US 5 753 751).

Liao discloses a curable silicone emulsion composition comprising a silicone alkenyl hydride copolymer represented by the formula  $M_uD_qT_rQ_s$ , a hydrosilylation catalyst, an emulsifier and water. (col. 7, line 29 to col. 11, line 37 and Examples) Hydrosilylation catalyst inhibitor such as acetylene alcohols, etc. can be used. (col.

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10, lines 41-51) A non-functional dimethylpolysiloxane can be used. (col. 10, lines 45-51). An organic solvent can be used. (col. 11, lines 17-35) The silicone alkenyl hydride copolymer represented by the formula M<sub>u</sub>D<sub>q</sub>T<sub>r</sub>Q<sub>s</sub> reads on Applicants' component A). The process of preparing the silicone alkenyl hydride copolymer (col. 4, line 41 to col. 7, line 27) is different from that for preparing Applicants' component A). However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

7. Claims 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (US 5 248 739).

Schmidt discloses a curable silicone composition comprising A) resinous polysiloxane containing Si-OH group (col. 3, lines 39-53), B) a polydiorganosiloxane containing Si-OH group and alkenyl group (co. 5, lines 17-

- 68), C) a crosslinking agent (col. 7, lines 1-13), and a hydrosilylation catalyst (col. 8, lines 16-45). A solvent can be used. (col. 9, lines 17-43) Note that after being cured, the cured composition cannot be distinguished from the cured composition in the instant claims. The curable composition is not prepared by the same process as that for preparing Applicants' curable composition. However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The

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fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

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klp

December 20, 2004

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KUO-LIANG PENG PRIMARY EXAMINE

PRIMARY EXAMINER